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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/672,472

09/26/2003

Iain J. McNeill

01-7096

8241

32681 7590 10/16/2009

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EXAMINER

ARMSTRONG, ANGELA A

ART UNIT

PAPER NUMBER

2626

NOTIFICATION DATE

DELIVERY MODE

10/16/2009

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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<b>Office Action Summary</b>	<b>Application No.</b> 10/672,472	<b>Applicant(s)</b> MCNEILL ET AL.	
	<b>Examiner</b> ANGELA A. ARMSTRONG	<b>Art Unit</b> 2626	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 25 June 2009.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

This Office Action is in response to the amendment filed June 25, 2009, amending claims 1-11. Currently, claims 1-22 are pending.

#### ***Claim Rejections - 35 USC § 101***

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. Claims 1-11 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

3. Claims 1-11 are directed to a computer readable storage medium, which as disclosed in the specification (page 16, paragraph 45) can be a data signal embodied in a carrier wave. A signal does not fall within one of the statutory classes of invention under 35 U.S.C. 101, and thus the claimed invention of claims 1-11 is directed to non-statutory subject matter.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

4. Claims 1, 5, 7-9, 11-12, 17-20, and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dewan (US Patent No. 7,043,008) in view of Chan et al (US Patent No. 6,600,821).

Dewan discloses a system and method for selectively monitoring, recording, storing, and handling telephone conversations through the use of speech analysis.

Regarding claim 1, Dewan discloses detecting voice activity on at least one of a receive and a transmit channel in a communication system; outputting voicing decision outputs based on the step of detecting; and generating a voice activity performance metric based on the voicing decision output (col. 2, line 41 continuing to col. 3, line 34). Dewan does not teach storing the voicing decision output in memory. However, storing the voicing decision outputs would allow the supervisor to track information of what type of voicing signal triggered the recording of the telephone conversations which would be used to monitor and evaluate the various agents of whom the calls have to be routed. Therefore, it would have been obvious to modify the system of Dewan to store voicing decision outputs to allow the supervisor to track information of what type of voicing signal triggered the recording of the telephone conversations which would be used to monitor and evaluate the various agents of whom the calls have to be routed.

Dewan does not teach the generated voice activity performance metric comprises a duration of voice activity. Chan discloses a system and method of detecting problematic call interactions of a communications system call centers with agents servicing customer telephone calls, which monitors whether or not a phone call has been of a long duration (col. 4, lines 46-53) and specifically monitors various speech and voice features or components, to make a determination of the problematic call (col. 4, line 54- col. 5, line 42). Chan specifically teaches the system allows problematic calls to be detected by a supervisor, ensuring the quality or level of service provided by call agents does not degrade. It would have been obvious to one of ordinary skill to modify the system of Dewan to detect voice activity or phone call duration to detect problematic calls and ensure call center agents are providing quality customer service, as suggested by Chan.

Regarding claim 5, Dewan discloses the performance metric facilitates detecting at least one of voice strain, stress, and excessive double talk (col. 2, line 41 continuing to col. 3, line 34).

Regarding claim 7, Dewan discloses outputting the voice activity performance metric to a display (col. 2, line 41 continuing to col. 3, line 34).

Regarding claim 8, Dewan discloses the step of detecting is performed throughout an active call via the communication system (col. 2, line 41 continuing to col. 3, line 34).

Regarding claim 9, Dewan discloses the step of detecting includes detecting voice activity on both the receive channel and the transmit channel in the communications system (col. 2, line 41 continuing to col. 3, line 34).

Regarding claim 11, Dewan discloses automatically routing calls based at least in part on the voice activity performance metric (col. 2, line 41 continuing to col. 3, line 34).

Regarding claims 12, 17-20 and 22: claims 12, 17-20 and 22 are system claims which perform functions that are similar to the process performed by the methods of claims of 1, 5, 7-9 and 11, and therefore are rejected under similar rationale.

Claims 2-4, 6, 10, 13-16, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dewan in view of Chan and further in view of Maloney et al (US Patent No. 5,696,811).

Regarding claims 2-4, 6, 10, 13-16, and 21 Dewan does not teach monitoring the conversations over a predetermined period of time or tracking the durations of the phone calls. Maloney discloses a method and system for automatically monitoring the performance quality of call center service representatives. Maloney discloses the system is available for monitoring for

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a specific time or range, tracking the number of extensions monitored, the number of channels monitored, the duration of the monitoring periods, time intervals of monitoring periods, and generates a report to the supervisor (col. 5, line 18 to col. 14, line 44). Maloney discloses the system assists in ensuring consistency and equity across call center agent performance evaluation. It would have been obvious to one of ordinary skill at the time of the invention to modify the system of Dewan to implement monitoring at predetermined time periods and tracking duration and time interval information associated with call center agent phone calls, as suggested by Maloney, for the purpose of ensuring consistency and equity across call center agent performance evaluation.

### ***Response to Arguments***

4. Applicant's arguments with respect to claims 1-22 have been considered but are not persuasive. Applicant argues neither Dewan nor Chan, either alone or in combination teach generating a voice activity performance metric including a duration of voice activity based on the voicing decision output stored in the memory. The Examiner respectfully disagrees. In response, the Examiner argues Chan recognizes the importance of monitoring the duration of the call interaction of the between the customer and the agent as a element in determining problematic calls as well as monitoring the speech associated with the call (to detect profanity, speaking styles, pitch, intensity, etc). One of ordinary skill would recognize the benefits of monitoring the duration of the call interaction and the voice signal, as suggested by Chan and modify Dewan so that after the voice activity was detected the system would continue to monitor

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the duration of the activity so as to determine the duration of the call interaction, and ultimately detect that a call of long duration was potentially a problematic call.

### ***Conclusion***

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ANGELA A. ARMSTRONG whose telephone number is (571)272-7598. The examiner can normally be reached on Monday-Thursday 11:30-8:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richemond Dorvil can be reached on 571-272-7602. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Angela A Armstrong/  
Primary Examiner, Art Unit 2626